

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of the Claims

Claims 1 and 3 are amended. Claims 2, 4, 7 and 10 are cancelled, without prejudice or disclaimer. Claims 15-16 are added. Support for the features of claims 15 and 16 can be found in the Original Specification, for example at, page 15 line 27 to page 16, line 2.

Claim Rejections – 35 USC §112

Claims 7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claims 7 and 10 are cancelled without prejudice or disclaimer in order to further prosecution.

Claim Rejections – 35 USC §102(e)

Claims 1, 3, 6, 7, and 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi (U.S. Patent No. 6,601,289). The rejection with regard to claims 7 and 10 are moot since they are cancelled. The rejection with regarding to claims 1, 3, 6, 9 and 11-14 is respectfully traversed.

Claims 1 and 3, as amended, *inter alia* recite, a method of manufacturing a superconducting wire, that comprises, maintaining the temperature of said wire at a substantially constant temperature between greater than or equal to 80 °C and less than or equal to 300 °C during the at least one interval. Kobayashi fails to disclose at least the above recited feature. Instead, as acknowledged in the Office Action of January 22, 2009, Kobayashi “discusses the gradual increasing of temperature”. (Office Action, Page 3; Kobayashi, col. 18, ll. 26-52) In particular, Kobayashi teaches heat treatment at a first temperature of 840°C for 50 hours and teaches a second heat treatment at a temperature of 835°C. (Kobayashi, col. 18, ll. 15-25; see Table 1) The method is Kobayashi discloses

increasing the temperature through 100°C to 300°C range in order to get to 840°C.  
(Kobayashi, col. 18, ll. 15-25; see Table 1) Thus, Kobayashi fails to disclose, maintaining the temperature of said wire at a substantially constant temperature.

Kobayashi fails to anticipate at least the above recited features of claims 1 and 3. Therefore claims 1 and 3 are believed to be allowable. Because claims 3, 6, 9 and 11-14 depend, directly or indirectly, from either claim 1 or 3, they are believed to be allowable for at least the same reasons claims 1 and 3 are believed to be allowable.

Claim Rejections – 35 USC §103

Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi. This rejection is respectfully traversed.

The present application (U.S. Patent App. No. 10/569,829) and the Kobayashi (U.S. Patent No. 6,601,289) were, at the time the invention of the present application was made, owned by, or subject to an obligation of assignment to, Sumitomo Electric Industries, LTD. Attached, as Exhibit 1, is a copy of an assignment recorded on March 29, 2006, at reel/frame 017405 / 0168, assigning the above-identified patent application (U.S. Patent App. No. 10/569,829) from the inventors to Sumitomo Electric Industries, LTD.

Attached, as Exhibit 2, is a copy of an assignment recorded on April 27, 2000, at reel / frame 010754 / 0864, assigning U.S. Patent App. No. 09/559,377 (Kobayashi, U.S. Patent No. 6,601,289) and all continuation-in-part applications of that application from the inventors of that application to Sumitomo Electric Industries, LTD.

Due to the common ownership, the Kobayashi reference (U.S. Patent No. 6,601,289) is disqualified as prior art under 35 U.S.C. 103(c) with respect to the present application for the rejections under 35 U.S.C. 103(a). Therefore, independent claim 1, as amended, is believed to be allowable.

Double Patenting

Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of copending Application No. 10/568,537. Applicants respectfully traverse the rejection due to patentable distinctions between the claims of the present application and the cited claim 3 of copending Application No. 10/568,537. In addition, a Terminal Disclaimer is also submitted herewith to overcome the rejection. Accordingly, the rejection of claim 1 is respectfully traversed.

New Claims

New claims 15 and 16 are added to further protect aspects of the present invention. New claims 15 and 16 are supported by the present disclosure, at least with respect to claims 15 and 16. (Page 15, line 27 to page 16, line 2) New claims 15 and 16, depend from independent claims 1 and 3, respectively. Accordingly, each of the new claims 15 and 16 are patentably distinguishable over the references of record, at least for reasons as discussed above with respect to claims 1 and 3. In addition each new claim 15 and 16 are further distinguished from the references of record.

For example, new claims 15 and 16 are dependent on claims 1, and 3, respectively, and incorporate every feature of the parent claims and further recite, the at least one interval is three days; wherein maintaining the temperature of the wire at a substantially constant temperature during the at least one interval occurs for three days. As discussed above regarding claims 1 and 3, Kobayashi fails to teach, suggest or render predictable maintaining the temperature of the wire at a substantially constant temperature. Kobayashi also fail to disclose, maintaining the temperature of the wire at a substantially constant temperature during the at least one interval occurs for three days. Therefore claims 15 and 16 are believed to be allowable.

Concluding Remarks

After amending the claims as set forth above, claims 1, 3, 5, 6, 8, 9 and 11-16 are pending in this application.

Applicants believe that the present application is in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

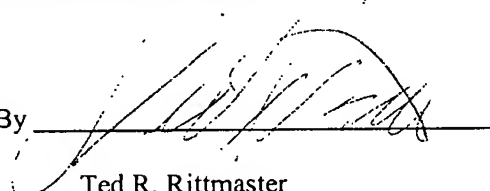
The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by the credit card payment instructions in EFS-Web being incorrect or absent, resulting in a rejected or incorrect credit card transaction, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date

4/17/09

By



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Attorney for Applicants  
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# Exhibit 1

**UNITED STATES PATENT AND TRADEMARK OFFICE**UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

APRIL 03, 2006

PTAS

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WASHINGTON HARBOUR  
3000 K STREET, N.W., SUITE 500  
WASHINGTON, D.C. 20007-5143UNITED STATES PATENT AND TRADEMARK OFFICE  
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RECORDATION DATE: 03/29/2006

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DOCKET NUMBER: 017700-0184

## ASSIGNOR:

FUJIKAMI, JUN

DOC DATE: 11/18/2005

## ASSIGNOR:

KATO, TAKESHI

DOC DATE: 11/28/2005

## ASSIGNEE:

SUMITOMO ELECTRIC INDUSTRIES, LTD.  
5-33, KITAHAMA 4-CHOME, CHUO-KU  
OSAKA-SHI, OSAKA, 541-0041, JAPAN

SERIAL NUMBER: 10569829

FILING DATE:

PATENT NUMBER:

ISSUE DATE:

TITLE: METHOD OF MANUFACTURING SUPERCONDUCTING WIRE

017405/0168 PAGE 2

SHARON LATIMER, EXAMINER  
ASSIGNMENT SERVICES BRANCH  
PUBLIC RECORDS DIVISION

# ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

*name and address of assignee* Sumitomo Electric Industries, Ltd.  
of 5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0041  
Japan

(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to this invention relating to

*title of invention* Method of Manufacturing Superconducting Wire  
as set forth in this United States Patent Application

*check one* ☐ executed concurrently herewith  
☐ executed on \_\_\_\_\_  
☒ Serial No. 10/569829 Filed 02-28-06

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention;



Each of the undersigned hereby grants the firm of **FOLEY & LARDNER** the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

<i><b>NAMES AND SIGNATURES OF INVENTORS</b></i>		
Name: Jun FUJIKAMI	Signature: <i>Jun Fujikami</i>	Date: <i>Nov. 18 2005</i>
Name: Takeshi KATO	Signature: <i>Takeshi Kato</i>	Date: <i>Nov. 28. 2005</i>
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<i><b>NAMES AND SIGNATURES OF WITNESSES</b></i>		
Name:	Signature:	Date:
Name:	Signature:	Date:

Note: *Prima facie* evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.

## Exhibit 2



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JULY 06, 2000

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NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
KOBAYASHI, SHINICHI

DOC DATE: 04/17/2000

ASSIGNEE:  
SUMITOMO ELECTRIC INDUSTRIES, LTD.  
5-33, KITAHAMA 4-CHOME, CHUO-KU  
OSAKA-SHI, OSAKA, JAPAN 541-0041

SERIAL NUMBER: 09559377  
PATENT NUMBER:

FILING DATE:  
ISSUE DATE:

KIMBERLY WHITE, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

# ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

name and address of assignee *SUMITOMO ELECTRIC INDUSTRIES, LTD.  
5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi  
Osaka, Japan 541-0041*

(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to this invention relating to

title of invention *MANUFACTURING PROCESS OF SUPERCONDUCTING WIRE AND RETAINER FOR  
HEAT TREATMENT*

as set forth in this United States Patent Application

check one ☒ executed concurrently herewith  
☐ executed on \_\_\_\_\_  
☐ Serial No. \_\_\_\_\_ Filed \_\_\_\_\_

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each of the undersigned hereby authorizes and request the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention;

Each of the undersigned hereby grants the firm of FOLEY & LARDNER the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

NAMES AND SIGNATURES OF INVENTORS		
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